

CLAIM AMENDMENTS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

WHAT IS CLAIMED IS:

1. (currently amended) An electromagnetic shock absorber comprising:

a shock absorber body which makes telescopic motion in response to an input from outside;

a ball screw mechanism which is arranged at the shock absorber body, converts the telescopic motion into rotary motion, and is composed of a ball nut and a screw shaft;

a motor which is provided coaxially with the shock absorber body and generates electromagnetic resistance to oppose against the rotary motion to be input into a rotary shaft of the motor; and

a cylindrical member which covers the shock absorber body and the motor from outside and whose part to cover the motor also serves as a frame of the motor;

wherein:

the shock absorber body has an external cylinder and an internal cylinder to be slidably inserted into the external cylinder;

an upper part of the external cylinder extends so as to cover the motor, and the frame of the motor is formed as a one-piece, integral structure with an extended part of the external cylinder;

the cylindrical member is constituted as a one-piece, integral structure with the external cylinder;

the ball nut of the ball screw mechanism is fixed to an upper part of the internal cylinder such that the ball nut does not contact an inner circumference of the external cylinder, and a screw shaft to be spirally engaged with the ball nut is connected with the rotary shaft of the motor;

an outer circumference of the internal cylinder is slidably supported only by a bush installed at ~~an inner~~ the inner circumference of a lower end of the external cylinder;

a halfway point of the screw shaft is rotatably supported through bearings installed inside the external cylinder;

a first cushion member is installed at a lower end of the screw shaft, the first cushion member coming into contact with the ball nut from an under surface when the internal cylinder makes a stroke up to a maximum descent position; and

a second cushion member is installed at a lower end of the bearing, the second cushion member coming into contact with the ball nut from a top surface when the internal cylinder makes a stroke up to a maximum ascent position.

2 and 3 (canceled).

4. (previously presented) The electromagnetic shock absorber according to claim 1, wherein the rotary shaft of the motor is rotatably supported at its both ends by a pair of bearings installed at the external cylinder.

5. (canceled)

6. (previously presented) The electromagnetic shock absorber according to claim 1, wherein the screw shaft and the rotary shaft are connected through a planetary gear mechanism which decelerates and transmits a rotation of the screw shaft to the rotary shaft.

7. (canceled)

8. (previously presented) The electromagnetic shock absorber according to claim 1, wherein the cylindrical member and the external cylinder are of a same diameter.